

Amendment Under 37 C.F.R. § 1.111
USAN 10/042,178

Q68010

AMENDMENTS TO THE DRAWINGS

Applicant submits herewith one replacement sheet.

Attachment: One Replacement Sheet

REMARKS

Reconsideration and allowance of the subject application are respectfully requested. Claims 1-6 are pending in the application. Applicant respectfully submits that the pending claims define patentable subject matter.

Formalities

Applicant thanks the Examiner for acknowledging claim to foreign priority under 35 U.S.C. § 119 and receipt of a certified copy of the priority document. Applicant also thanks the Examiner for reviewing and initialing the information disclosure statements submitted on February 28, 2002, March 5, 2002, and June 2, 2005.

The drawings stand objected to because Figures 1 and 3 allegedly need descriptive labels. Applicant herewith submits a replacement drawing sheet, and respectfully requests that the drawings be accepted.

The specification stands objected to because of informalities in the abstract of the disclosure. Applicant has amended the abstract, and respectfully requests that the objection be removed.

Claim amendments

Applicant has amended claims 1-6 in order to improve conformance with claims practice in the United States. No new matter has been added, and Applicant respectfully requests that the Examiner enter the claim amendments into the record.

New claim 7 has been added to more fully claim features of the invention.

Claim rejections – 35 U.S.C. § 112

Claim 4 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Applicant has amended claim 4 and respectfully requests that the Examiner withdraw the objection.

Claim rejections – 35 U.S.C. § 102

Claims 1, 3, 5 and 6 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 6,049,524 to Fukushima. Applicant respectfully traverses this rejection.

Claim 1 recites the limitation of “each of said at least two router modules having connections with at least one network, and having at least one state machine, each state machine managing an interface associated with one of said connections.” The Examiner asserts that Fukushima discloses this feature at Fig. 9 and col. 8, lines 60-65. However, Applicant respectfully disagrees with the Examiner’s position.

At col. 8, lines 60-65, Fukushima discusses the operation of the protocol information manager module 15. This module 15 generates routing protocol information 21, including information about an interface state 23, and retains this information. Fig. 9 of Fukushima shows the process whereby the protocol information manager module 15 receives information from an RP packet transmission-reception module 14 and checks if the information received is network link-state information. However, Fukushima does not show that the protocol information

manager module 15 manages an interface associated with a connection. The protocol information manager module 15 simply stores information on the interface state 23 without acting on this information in any way. In other words, the protocol information manager module 15 is in charge of receiving and sending information between the route calculation units 11 via a special protocol. It manages the protocol, but not the interface state 23.

Fig. 2 of Fukushima does appear to disclose that the respective route calculation units 11a, 11b contain a state monitor module 20. At col. 8, lines 45-54, Fukushima discusses the operation of the state monitor module 20. The module 20 holds state information about its own route calculation unit 11 and the other route calculation unit 11, monitors the other route calculation unit, and brings its own route calculation unit into the active mode and states the RP packet transmission-reception module. Nothing in this description discloses that the state monitor module 20 manages an interface associated with a connection.

Thus, neither the protocol information manager module 15 nor the state monitor module 20 disclose the feature of each state machine managing an interface associated with one of said connections, as required by claim 1. Claim 1 is therefore patentable over Fukushima for at least this reason. Claims 3, 5, and 6 are patentable based at least on their dependencies.

Claim 5 further recites the limitation of a means for storing data relating to an associated interface when said interface is created. The Examiner asserts that this feature is taught by Fukushima at col. 8, lines 60-65. However, the cited portion of Fukushima merely teaches that the protocol information manager module 15 generates routing protocol information such as

interface state 23. Fukushima does not address timing. Thus, Fukushima does not teach storing data relating to an associated interface when said interface is created, as required by claim 5.

Accordingly, claim 5 is patentable for this additional reason.

Claim 6 recites the limitation that the stable state is a state from the following list: “Down”, “Point to Point”, “DROther”, “Backup”, and “DR” in an open shortest path protocol. The Examiner asserts that this limitation is disclosed by Fukushima at col. 10, lines 33-48. However, the cited portion of Fukushima does not disclose any of the states listed and required by claim 6. Thus, claim 6 is patentable for this additional reason.

Claim rejections – 35 U.S.C. § 103

Claim 2 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fukushima in view of U.S. Patent No. 6,577,634 to Tsukakoshi. Applicant respectfully traverses this rejection.

Claim 2 depends from claim 1, which has been shown above to be patentable over Fukushima. Tsukakoshi does not cure the deficiencies of Fukushima.

The Examiner acknowledges that Fukushima does not disclose all of the features set forth in claim 2. However the Examiner believes that Tsukakoshi makes up for the deficiencies of Fukushima. Specifically, the Examiner states:

Fukushima does not disclose a shared memory that is shared between the router modules to hold the data relating to the states of the state machines. However, Tsukakoshi, in Patent No. 6,577,634, discloses a router with a plurality of route calculation units, only one of which is in the active state, while the others are in the backup state (column 10, lines 11-13). The NISP (Network Information

Sharing Protocol) means generates a network information packets 19 (Fig. 18) based on an updated network information and sends the packet to all the backup-state route calculation units 20 (column 10, lines 33-38). This keeps the network information 16 of the backup-state route calculation unit 20 up-to-date (column 10, lines 58-60). This prevents the need for the backup-state route calculation unit, once entering the active state, to obtain network information 16 from some other router 25, minimizing the influence of an error (column 10, lines 60-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Fukushima a shared memory as suggested by Tsukakoshi in order for the routing modules to share the network information and minimize the influence of error.

However, Tsukakoshi does not disclose a shared memory in which data is stored and shared between router modules. Tsukakoshi discloses a Network Information Sharing Protocol means which sends information packets. Since packets are sent, it is logically unnecessary to use a shared memory, as required by claim 2. Nowhere does Tsukakoshi disclose a memory in which data is stored and shared between the route calculation units 11, which allegedly correspond to the claimed router modules. Therefore, for at least this reason, claim 2 is patentably distinguishable over Fukushima and Tsukakoshi, either alone or in combination, and Applicant respectfully requests that the Examiner withdraw the rejection.

Claim 4 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fukushima in view of U.S. Patent No. 6,073,184 to Couturier. Applicant respectfully traverses this rejection.

Claim 4 depends from claim 1, which has been shown above to be patentable over Fukushima. Couturier does not cure the deficiencies of Fukushima because Couturier concerns a method of transmitting a notification in an object-oriented and distributed-application data

processing network. Couturier contains no teachings relevant to state machines managing an interface associated with a network connection. Therefore, claim 4 is patentable over the Fukushima and Couturier references, alone or in combination, and Applicant respectfully requests the Examiner to withdraw the rejection.

Claim rejections – double patenting

Claims 1-6 stand provisionally rejected under 35 U.S.C. § 101 (statutory double patenting) as allegedly claiming the same invention as that of claims 1-6 of copending Application No. 10/042177.

The Examiner has presented no supporting argument to establish a *prima facie* case of statutory double patenting. The test for statutory double patenting or “same invention” double patenting is whether a claim in the application could be literally infringed without literally infringing a corresponding claim in the patent. If it could be, the claims do not define identically the same invention. *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

In the present case, independent claim 1 of the present application recites limitations similar to the limitations of claim 1 of copending Application No. 10/042,177. However, claim 1 of the present application recites the additional limitation of “each state machine managing an interface associate with one of said connections.” Thus, claim 1 of the present invention is clearly narrower than claim 1 of copending Application No. 10/042,177.

Accordingly, since claim 1 of the present application is narrower than claim 1 of copending Application No. 10/042,177, claim 1 of Application No. 10/042,177 could be literally

infringed without literally infringing corresponding claim 1 of the present application. Thus, the claims do not define identically the same invention and the statutory double patenting is improper.

Accordingly, the Examiner is respectfully requested to withdraw the statutory double patenting rejection of claims 1-6.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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